

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking Regarding
Policies, Procedures and Rules for the
California Solar Initiative, the Self-Generation
Incentive Program and Other Distributed
Generation Issues.

Rulemaking 12-11-005
(Filed November 8, 2012)

**NATIONAL FUEL CELL RESEARCH CENTER REPLY COMMENTS ON PROPOSED
DECISION REVISING THE SELF-GENERATION INCENTIVE PROGRAM PURSUANT
TO SENATE BILL 861, ASSEMBLY BILL 1478, AND IMPLEMENTING OTHER
CHANGES**

June 13, 2016

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Pursuant to Section 14.3 of the California Public Utilities Commission
(Commission) Rules of Practice and Procedure, the National Fuel Cell Research Center
(NFCRC) submits these reply comments in response to the Proposed Decision (PD)
Revising the Self-Generation Incentive Program (SGIP) Pursuant to Senate Bill 861,
Assembly Bill 1478, and Implementing Other Changes.

I. Introduction

The NFCRC, located at the University of California, Irvine, is working with GE-Fuel Cells, LLC; LG Fuel Cell Systems Inc.; Bloom Energy; Doosan Fuel Cell America; and FuelCell Energy. The NFCRC is submitting reply comments to highlight the importance of fair and impartial decision making on the SGIP budget allocation, and asks the Commission to (1) recognize the distinct and unique benefits of different technologies in the SGIP, and (2) to maintain a transparent program that does not result in the use of SGIP funds for company profits.

II. Reply Comments on the Proposed Decision

A. Program Goals – Market Transformation

We support the comments of PG&E and SoCalGas in requesting the release of the Market Transformation (MT) Study. PG&E states “...*the MT study performed by Itron in 2015 for SGIP, which discusses MT, has not been released to the public, so the stakeholders have not been able to comment on SGIP’s progress in*

achieving MT goals. PG&E requests that the Commission complete and publish this report.”¹ SoCalGas points out that “...the SGIP’s Market Transformation report, which has been ready for over six 6 months but still not provided to the public and stakeholders by staff, identified over 15GW of potential generation in California.”²

The NFCRC urges the release of the Market Transformation Study to enable informed decision making.

B. Incentive Budget

The NFCRC would like to correct the record by addressing the CESA statement that “...without fuel-cells, the historical data shows energy storage would account for 80% of SGIP funds in 2015.”³ Fuel cells, including all-electric fuel cells, have been, and currently are, an eligible SGIP technology, and have been a successful part of the program to date. The Proposed Decision also includes fuel cells and all-electric fuel cells as eligible technologies, and proper evaluation of the use of past funding provides justification for a different funding allocation than the proposed 75/25 percent split.

SDG&E supports the assertion that the Commission is 1) using inadequate justification to allocate 75% of the budget to storage, and 2) ignoring data that are on the record:

The indication that “Staff Proposal’s 75%/25% split strikes the right balance of the programs goals of reducing GHGs, providing grid support and enabling market transformation” is not supported by the record. The 2013 Self-Generation Incentive Program Impact Report showed that energy storage was used in a way that did not reduce GHG. Since there were no restrictions on how storage is used, it turns out that reducing demand charges is more important than reducing energy charges, and that customer usage peaks are not coincident with system peaks. Second, the PD states “Energy storage is the fastest growing source of projects for SGIP,” but, as indicated in SDG&E’s comments, that growing source of projects occurred due to overly generous incentives. The PD has acknowledged that the incentives were “too high” yet ignores that impact on the amount of storage projects requesting incentives. Third, the PD commits technical and legal error by not “maximizing ratepayer value.” Ratepayer value is measured by the Program Administrator Cost (PAC) and the Ratepayer Impact Measure (RIM) Tests. The 2015 Self-Generation Incentive Program Cost Effectiveness Study shows that “... all evaluated SGIP technologies **other than stand-alone energy storage**

¹ PG&E Opening Comments on the SGIP Proposed Decision, p. 13.

² SoCalGas Opening Comments on the SGIP Proposed Decision, p. 5.

³ CESA Opening Comments on the SGIP Proposed Decision, p. 5.

have PAC benefit-cost ratios significantly higher than 1” [Emphasis added]. In other words, all of the generation technologies provide ratepayers with net benefits, but storage does not. There is no basis for expanding storage beyond the 2015 roughly 50/50 split based on the statutorily mandated program requirement to maximize ratepayer value.⁴

SoCalGas further explains:

SoCalGas responded by proposing an even 50% split between AES and Generation Technologies with an opportunity to increase the AES percentage if warranted. The primary reason for making such recommendations was based on the proven ability of each technology category in meeting the program goals. To date, AES technologies’ benefits are theoretical and unsubstantiated by any SGIP measurement and evaluation reports.⁵

PG&E also expresses concerns about the data that was overlooked in making the decision for this budget allocation:

The Proposed Decision allocates 75% of the SGIP budget to energy storage and 25% to generation technologies. As PG&E explained in prior comments, there are several reasons suggesting that this is not the ideal split. First, recent impact reports have indicated that generation technologies have achieved greater GHG savings than storage. Even under the PD’s adoption of a 260-hour discharge requirement for commercial systems, PG&E has questions about the program’s ability to achieve its goals with such an emphasis on storage. For example, with regard to lowering GHG emissions, most commercial two hour storage projects are designed to address demand charges, to “peak shave.” Hence, this use case generally will not lower GHGs more than clean, load-following generators if there are no mandated hours or months for charge/discharge or customer tariff requirements.

Second, the level of recent program subscription does not warrant that 75% of the funds go to storage if there is to be any meaningful generation component of the program. Only 57% of funds requested in PG&E territory on February 23, 2016 were for storage, not 75%. The statewide public report shows that only 62% of incentives and 52% of the MW capacity requested were for storage projects in the recent February 23rd opening.⁶

The NFCRC again asks that the Commission, based on available public information, program history, and proven performance of generation technologies,

⁴ SDG&E Opening Comments on the SGIP Proposed Decision, p.p. 2-3.

⁵ SCG Opening Comments on the SGIP Proposed Decision, p. 8.

⁶ PG&E Opening Comments on the SGIP Proposed Decision, pp. 2-3.

allocate 50% of the incentive budget to energy storage and 50% to generation technologies.

C. Manufacturer Cap and Installer/Developer Cap

These caps, and the requirement for minimum customer investment, were put in place as safeguards to maintain a fair limitation on any one party's ability to disproportionately profit from the SGIP.

The NFCRC agrees with the opening comments of CCDC, Doosan, and GreenCharge Networks, that the manufacturer cap should not be eliminated, leaving only the Installer/Developer Cap. Rather, these should both be utilized in concert, for consideration of projects where manufacturers fulfill both roles, and for consideration of new entrants to the program. As stated by Doosan, *"for AES systems there is clearly enough margin for developers to make a profit thus the OEMs don't develop any projects directly. For generation projects, specifically fuel cells, the projects are often developed and installed by the OEMs directly. There is generally not enough margin in these projects to allow for a developer to make enough profit."*⁷ GreenCharge Networks expresses concern for newer, smaller manufacturers that *"without a manufacturer cap, emerging manufacturers may not have the opportunity that other technologies received."*⁸

The NFCRC requests that the Commission consider the potential negative impacts and reduced transparency that could result from removing or altering these caps and requirements, (such as the minimum customer investment) and retain both the Manufacturer and Installer/Developer Caps.

⁷ Doosan Opening Comments on the SGIP Proposed Decision, p. 16.

⁸ GreenCharge Networks Opening Comments on the SGIP Proposed Decision, p. 10.

III. Conclusion

The NFCRC appreciates the opportunity to offer these reply comments to the Commission.

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Respectfully submitted,

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